

CLAIMS:

5
10
1. A method of disinfecting or sanitising a space occupied by airborne microorganisms and/or viruses, which method comprises directing into the space liquid droplets from a spray device containing a disinfecting or sanitising composition, a unipolar charge being imparted to the said liquid droplets by double layer charging during the spraying of the liquid droplets from the aerosol spray device, the unipolar charge being at a level such that the said droplets have a charge to mass ratio of at least $\pm 1 \times 10^{-4}$ C/kg.

15
2. A method as claimed in claim 1 wherein the spray device is an aerosol spray device.

20
3. A method as claimed in claim 1 or claim 2 wherein the disinfecting or sanitising composition is an emulsion.

25
4. A method as claimed in any one of the preceding claims wherein the liquid droplets have a diameter in the range of from 5 to 100 micrometres.

30
5. A method as claimed in any one of the preceding claims wherein the unipolar charge is imparted to the liquid droplets solely by the interaction between the liquid and the spray device, without any charge being imparted thereto from an internal or external charge inducing device.

6. A method as claimed in claim 5 wherein the droplet charge to mass ratio of at least $\pm 1 \times 10^{-4}$ C/kg is imparted to the droplets as a result of the use of an aerosol spray device with at least one of the features of the material of the actuator, the size and shape of the orifice of the actuator, the diameter of the dip tube, the characteristics of the valve and the formulation of the disinfecting or sanitising composition contained within the aerosol spray device being chosen in order to achieve the said droplet charge to mass ratio by double layer charging imparting the unipolar charge to the droplets during the actual spraying of the liquid droplets from the orifice of the aerosol spray device.

7. A method as claimed in any one of the preceding claims wherein the disinfecting or sanitising composition comprises an oil phase, an aqueous phase, a surfactant, an anti-bacterial agent, a fungicide or an anti-viral agent, and a propellant.

8. A method as claimed in claim 7 wherein the anti-bacterial or anti-viral agent is an essential oil selected from thyme, lemon grass, lemon, orange, grapefruit, yeast, oregano, anise, clove, cinnamaldehyde, cinnamon, carvacrol, rose, lavender, citronella, eucalyptus, peppermint, camphor, sandalwood, juniper berry, Siberian pine needle, pine sylvestre, tea tree, litsea, rosewood, patchouli, vetiver, cedarwood and mixtures thereof.

9. A method as claimed in claim 7 wherein the anti-bacterial agent is a quaternary ammonium compound.

5 10. A method according to any one of claims 7 to 9 wherein the oil phase includes a C₉ - C₁₂ hydrocarbon.

10 11. A method as claimed in claim 10 wherein the C₉ - C₁₂ hydrocarbon is present in the composition in an amount of from 2 to 10% w/w.

15 12. A method as claimed in any one of claims 7 to 11 wherein the surfactant is glyceryl oleate or a polyglycerol oleate.

20 13. A method as claimed in any one of claims 7 to 12 wherein the surfactant is present in the composition in an amount of from 0.1 to 1.0% w/w.

14. A method as claimed in any one of claims 7 to 13 wherein the propellant is liquified petroleum gas.

25 15. A method as claimed in claim 14 wherein the propellant is present in the composition in an amount of from 20 to 50% w/w.

add AS
add
C17